

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/CA2004/000824

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C12Q1/68 C07D333/32 C12N15/11

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, MEDLINE, BIOSIS, EMBASE, CHEM ABS Data, Sequence Search

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| X          | WO 02/081735 A (BOISSINOT MAURICE ;<br>INFECTIO DIAGNOSTIC INC (CA); LECLERC<br>MARIO (CA);) 17 October 2002 (2002-10-17)<br>the whole document  | 1-36                  |
| X          | HO HOANG-ANH, ET AL.,: "colorimetric and<br>fluorometric detection of nucleic acids<br>using cationic polythiophene derivatives"<br>ANGEW. CHEM. INT. ED.,<br>vol. 41, no. 9, 1 May 2002 (2002-05-01),<br>pages 1548-1551, XP002313846<br>cited in the application<br>the whole document | 1-36                  |
|            | -----<br>-/-<br>-----  |                       |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \* & \* document member of the same patent family

Date of the actual completion of the international search

18 January 2005

Date of mailing of the international search report

31/01/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Mueller, F

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/CA2004/000824

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| A          | <p>EWBANK P C ET AL: "Amine functionalized polythiophenes: synthesis and formation of chiral, ordered structures on DNA substrates"<br/>TETRAHEDRON LETTERS, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL,<br/>vol. 42, no. 2,<br/>8 January 2001 (2001-01-08), pages 155-157, XP004227724<br/>ISSN: 0040-4039<br/>see whole doc. esp. p.157, last par.</p> |                       |
| A          | <p>BOCK L C ET AL: "SELECTION OF SINGLE-STRANDED DNA MOLECULES THAT BIND AND INHIBIT HUMAN THROMBIN"<br/>NATURE, MACMILLAN JOURNALS LTD. LONDON, GB,<br/>vol. 355, no. 6360,<br/>6 February 1992 (1992-02-06), pages 564-566, XP000453533<br/>ISSN: 0028-0836<br/>see whole doc. esp. Table 1 and Fig 2</p>   |                       |
| X,P        | <p>HO HOANG A. &amp; LECLERC M.: "new colorimetric and fluorometric chemosensor based on a cationic polythiophene derivative for iodide-specific detection"<br/>J. AM. CHEM. SOC.,<br/>vol. 125, 22 March 2004 (2004-03-22), pages 4412-4413, XP002313847<br/>the whole document</p>  | 1-36                  |
| X,P        | <p>HO HOANG-ANH &amp; LECLERC M.: "optical sensors based on hybrid aptamer/conjugated polymer complexes"<br/>J. AM. CHEM. SOC.,<br/>vol. 126, 15 January 2004 (2004-01-15), pages 1384-1387, XP002313848<br/>the whole document</p>   | 1-36                  |
| A          | <p>US 5 631 146 A (SZOSTAK JACK W ET AL)<br/>20 May 1997 (1997-05-20)<br/>see esp. claims and seq id 82</p>   |                       |

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/CA2004/000824

| Patent document<br>cited in search report |   | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|---|---|---------------------|----------------------------|---------------------|
| WO 02081735                               | A | 17-10-2002          | WO 02081735 A2             | 17-10-2002          |
|   |   |                     | CA 2442860 A1              | 17-10-2002          |
|   |   |                     | EP 1373246 A2              | 02-01-2004          |
|   |   |                     | JP 2004534013 T            | 11-11-2004          |
|   |   |                     | US 2004171001 A1           | 02-09-2004          |
| US 5631146                                | A | 20-05-1997          | NONE                       |                     |